D-20743-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFI

Serial No.:

09/725,845

Group Art Unit: 1724

Inventors:

Zhang et al

Filed: 11/30/00

Title: INTERMOLECULARLY BOUND

TRANSITION ELEMENT COMPLEXES

FOR OXYGEN ADSORPTION

Examiner: Greene

VIA FAX (703) 305-7718

Assistant Commissioner for Patents Washington, DC 20231

Sir:

I hereby certify that this correspondence is being facatmile trans-B Patent and Trademark Office, Fox No. • <u>7718</u> cm <u>7/9/1/2.</u> (Dess) id or printed name of person aligning this certificate:

OFFICIAL AMENDMENT

This is in response to the Office Action mailed January 9, 2002. A threemonth extension of time is attached herewith in duplicate.

In the Specification:

In the paragraph bridging pages 6-7:

FAX RECEIVED

JUL 9 2002

GROUP 17(10)

US Patent 6,183,709, assigned to the owner of the present invention, the disclosure of which is incorporated herein, discloses oxygen- selective adsorbent compositions which utilize intermolecular coordination to generate porosity. That invention involves TECs having up to four intramolecular donor ligands coordinated with a transition element ion, wherein the ligands provide a fifth donor site to intermolecularly bond to a second transition element ion contained in a second discrete TEC. These compositions exhibit high oxygen loadings and oxygen half saturation pressures which are suitable for gas separation. In the examples described therein, the structures contain five donors: four donors for intramolecular coordination to the primary metallic center, and one donor for intermolecular coordination with the metal of a second discrete TEC structure. The resultant porosity from this intermolecular coordination offers improved oxygen adsorption characteristics as compared with cyanocobaltate materials of the prior art.

